

TECHNOLOGICAL MODERNIZATION PROGRAM (TMP II)

(AR-0171)

EXECUTIVE SUMMARY

Borrower and guarantor:	Republic of Argentina	
Executing agency:	Secretariat of Science and Technology (SECyT) of the Ministry of Culture and Education (MCE)	
Amount and source:	IDB: (OC)	US\$140 million
	Local:	<u>US\$140 million</u>
	Total:	US\$280 million
Financial terms and conditions:	Amortization period:	20 years
	Disbursement period:	3.5 years
	Grace period:	4 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75%
	Currency:	in US dollars from the Bank's Single Currency Facility
Objectives:	The general objective of the program would be to help make it possible for enterprises – primarily small and medium-sized enterprises (SMEs) that produce goods and services – to initiate, import, alter or adapt technologies to increase their efficiency and competitiveness.	
Description:	The purpose of the TMP II is to increase the efficiency of enterprises through credit and noncredit cofinancing instruments, and consists of three subprograms:	
	Subprogram for the promotion of innovation (US\$110 million). This will incorporate the following incentive mechanisms for innovative technological activities:	
	a. Nonreimbursable contributions – NRCs (US\$57 million). Up to 50 percent of the cost of innovation projects submitted by enterprises for the development and improvement of products and processes, including the adoption of clean technologies;	

- b. **Credits for scientific/technological enterprises and institutions (US\$54 million).** Program credits will cofinance technological modernization and innovation projects of productive enterprises and institutions that provide technological services whose results can be incorporated by and aid in improving the competitiveness of enterprises that produce goods and services.

Subprogram for the strategic development of research and development capabilities (US\$125 million). This would support scientific activities aimed at specific issues of importance to the productive sectors for the promotion of technical research and development. This subprogram includes two components:

- a. **Strengthening scientific and technological capabilities (US\$98 million).** This would finance infrastructure and facilities for research and development for national groups involved in research and in services that support research.
- b. **Serving thematic and geographic areas with special needs (US\$27 million).** This would serve priority areas of the National Multi-Year Science and Technology Plan 1999-2001 or those of provinces in which the country does not have an adequate scientific and technological base.

Subprogram to support the institutional consolidation of scientific and technological institutions (US\$6 million). This is targeted to improving institutional management and efficiency in the use of resources of the Secretariat of Science and Technology (SECyT) and of the National Agency for the Promotion of Science and Technology (part of the SECyT), which are directly responsible for execution of the TMP II.

CESI: The Committee on Environment and Social Impact (CESI) recommended: (i) establishing environmental criteria for the selection of projects; and (ii) evaluating the effectiveness of environmental criteria and procedures of projects that are part of the technological modernization program (802/OC-AR) (TMP I) currently being executed.

Benefits: The program will help to strengthen Argentina's capability in the area of science and technology, consolidating the accomplishments achieved in the TMP I. The TMP II will incorporate technical progress and integration to provide products with greater added value, in order to minimize the problems experienced by SMEs, in particular, in adopting improved international technological practices, while helping them reach satisfactory production levels. As a result of

the program, an increase in science and technology investment in the productive sector is anticipated, as well as in the number of innovative firms, elements that play a crucial role in driving the economy. Similarly, a qualitative and quantitative improvement is anticipated in the support services provided by scientific and technological institutions, as well as by private consulting firms.

The design of this program is also intended to enhance the quality and relevance of research projects, strengthening the links between research centers and those who will potentially make use of their results, and encouraging increased scientific and technological activity in priority areas targeting the needs of the productive sector.

In terms of the institutional element, as a special factor, the reorganization of science and technology institutions in Argentina will be extended and consolidated in the context of the new approach of the National Innovation System (SNI) to emphasize the productive sector and its needs for innovation and technological support.

Risks:

While approval of the operation coincides with the period of change in the Argentine government, the current management of the SECyT has, in order to avoid any discontinuity in the operation, submitted the TMP II to the national congress and has received support from the main parties that will elect the new government.

The transition from the end of TMP I operations to the start of those of the TMP II requires budgetary resources for both programs. TMP II funds are also needed in order to cover part of the execution of scientific and technological research projects carried out in the TMP I. The availability of budgetary resources was discussed with the head of the government, the Ministry of Economy, the SECyT and the Bank. There was consensus among government officials on the importance of the program and regarding contributions on the part of the government. In correspondence of July 7, 1999, sent to the Bank, the SECyT indicates the agreements between the agencies to make resources available.

Bearing in mind that it was agreed that the interest rates for the projects would be set at market rates, a hypothetical situation was posited, in which there is a high degree of uncertainty in the markets, with sudden and severe increases in the interest rate that would be incompatible with the long-term nature of the program's financing, thus endangering the viability of the projects. In order to mitigate the possibility of such situations, it was agreed that a flexible six-month average would be used as the basis for calculating the lending rates

used, in order to establish the transfer rates to be used for secondary loans to enterprises.

Bank's country and sector strategy:

The proposed program accommodates the government's strategy for the coming years, including the Bank's operating strategy in Argentina, which has the following priority areas: (i) expand and consolidate the **modernization of the state**; (ii) **reduce poverty and raise the quality of life of the population**; and (iii) **raise the efficiency and competitiveness of the nation's production**. The TMP II is consistent with this operating strategy, the recommendations of the entrepreneurial development strategy for Argentine SMEs (prepared by the Bank), the science and technology strategy (GN-2024) approved in December 1998, and the information technology strategy (GN-1931-1) approved by the Bank in January 1999, aimed at consolidating and enhancing the availability of mechanisms to support technological innovation in the productive sector.

Special contractual clauses:

As prerequisites to the first disbursement, the following will be considered: (i) the entry into effect of the operating regulations (par. 3.13); (ii) the dissemination and promotion plan for the NRCs and credit for scientific and technological enterprises and institutions (par. 2.5); (iii) submission of model contracts for the NRCs (par. 2.7); (iv) preparation of the project formulation guide for the NRCs (par. 2.7); (iv) submission of the terms of reference for the consulting activities of the subprogram to support the institutional consolidation of scientific and technological institutions (par. 2.18); and (v) terms of reference on gender, from the consulting firms (par. 3.12).

The borrower has requested that the Bank recognize as expenses for TMP II items corresponding to commitments already undertaken through the 1998 bidding process for scientific and technological research projects that were awarded after May 1, 1999. The amounts committed and procedures used in awarding the contracts are the same as used in TMP I, covering the gap in resources to ensure the continuity of work pending approval of the present operation. The project team considers that the Bank could recognize up to US\$20 million for these items (paragraph 3.18).

Exceptions to Bank policy:

None.

Procurement:

The maximum limits above which procurements for this project will be made through international public bidding are: US\$350,000 for goods and US\$5 million for works. The Bank will conduct an ex post review, on a sample basis, of procurement of goods under

US\$200,000 and of contracting of consulting services under US\$100,000 (par. 3.19).

**Poverty-
targeting and
social sector
classification:**

This operation does not qualify as a project that promotes social equity, as described in the key objectives for the Bank's activity contained in the report on the Eighth Replenishment (Document AB-1704) (par. 4.25).